



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/998,750

11/30/2001

Judith A. Bayer

9998

7009

26890 7590 10/24/2011

JAMES M. STOVER
TERADATA CORPORATION
10000 INNOVATION DRIVE
DAYTON, OH 45342

EXAMINER

LASTRA, DANIEL

ART UNIT

PAPER NUMBER

3688

MAIL DATE

DELIVERY MODE

10/24/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2
3
4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
6

7
8 *Ex parte* JUDITH A. BAYER and SCOTT M. COLLINS
9

10
11 Appeal 2010-005642
12 Application 09/998,750
13 Technology Center 3600
14

15
16
17 Before HUBERT C. LORIN, ANTON W. FETTING, and
18 JOSEPH A. FISCHETTI, *Administrative Patent Judges*.
19 FETTING, *Administrative Patent Judge*.

20 DECISION ON APPEAL

STATEMENT OF THE CASE¹

Judith A. Bayer and Scott M. Collins (Appellants) seek review under 35 U.S.C. § 134 (2002) of a final rejection of claims 1-21, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

The Appellants invented a way of implementing automated promotion response modeling for use by customer relationship management systems (Specification 2:19-21).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below [bracketed matter and some paragraphing added].

1. A computer-implemented method of creating a customer promotion response model for use in customer relationship marketing, comprising:
 - (a) generating,
 - in a computer,
 - an input data set for the response model,
 - wherein the input data set is generated using an Analytic Data Set Template containing one or more Analytic Variables that include both
 - primitives that are base variables and
 - conditions that are predicates, aggregates or other functions,

¹ Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed August 11, 2009) and Reply Brief ("Reply Br.," filed January 13, 2010), and the Examiner's Answer ("Ans.," mailed March 24, 2010).

1 wherein the primitives and conditions determine
2 how the Analytic Variables are derived
3 from operational data
4 to produce the input data set, and
5 wherein the Analytic Variables are subdivided into
6 independent variables and
7 their related dependent variables;

8 (b) splitting,
9 in the computer,
10 the input data set into
11 a test sample and
12 a validation sample;

13 (c) identifying,
14 in the computer,
15 the independent variables and
16 their related dependent variables
17 using the test sample;

18 (d) identifying,
19 in the computer,
20 a Transformation Type for each of
21 the identified independent variables and
22 their related dependent variables;

23 (e) estimating,
24 in the computer,
25 a Coefficient for each of
26 the identified independent variables and
27 their related dependent variables;

28 (f) generating,
29 in the computer,
30 a Model Equation for each of
31 the identified independent variables and
32 their related dependent variables
33 using
34 the identified Transformation Type and
35 estimated Coefficient;

36 (g) validating,
37 in the computer,
38 the generated Model Equation
39 by applying it to the validation sample; and

(h) scoring,
in the computer,
customers retrieved from a database
using the validated Model Equation
as a customer promotion response model
for use in customer relationship marketing.

7 The Examiner relies upon the following prior art:

Cook US 6,631,360 B1 Oct. 7, 2003

8 Claims 1-21 stand rejected under 35 U.S.C. § 102(e) as anticipated by
9 Cook.

10 ISSUES

11 The issue of anticipation turns on whether Cook describes validating a
12 model equation by applying it to a validation sample separate from a test
13 sample.

14 FACTS PERTINENT TO THE ISSUES

15 The following enumerated Findings of Fact (FF) are believed to be
16 supported by a preponderance of the evidence.

17 *Facts Related to the Prior Art*18 *Cook*

01. Cook is directed to a way not only to identify an individual for
targeting, but to estimate the proportions of selected sub-
populations in a larger population. Cook 2:64-66.

02. Cook performs a training process and an unknown sample data
analysis process. The training process employs training (known)

sample data that categorizes individuals based on the individuals' profile features. The training sample data is sequentially applied to multiple inference engines to determine which engine is best based on a desired objective. Cook 3:16-21.

03. The Examiner found that Cook described test data at Cook 10:55 - 11:20. This portion of Cook describes training sample data, which corresponds to the claimed test data, and unknown data, which corresponds to the claimed validation data.

04. The Examiner found that Cook described validating a process using validation data at Cook 11:5-20. This portion of Cook instead describes calibrating training sample data, which corresponds to the claimed test data.

ANALYSIS

We agree with the Appellants that Cook fails to describe validating a model equation by applying it to a validation sample separate from a test sample. Appeal Br. 30-31.

The Examiner found that Cook's unknown sample corresponded to the claimed validation sample. FF 03. The Examiner then found that Cook's calibration of its test sample corresponded to the claimed validation. FF 04. Clearly, Cook is not using its unknown sample in Cook's calibration. We have been unable to find any description of using the unknown data or any other data separate from the training sample data, for validation purposes. Cook appears to use the unknown data for forecasting purposes, implying the forecast process has already been validated from the training sample

1 data. Thus, Cook does not describe validating a model equation by applying
2 it to a validation sample separate from a test sample.

3 CONCLUSIONS OF LAW

4 The rejection of claims 1-21 under 35 U.S.C. § 102(e) as anticipated by
5 Cook is improper.

6 DECISION

7 The rejection of claims 1-21 under 35 U.S.C. § 102(e) as anticipated by
8 Cook is not sustained.

9
10 REVERSED

11
12 erc